

SYSTEM AND METHOD TO REDUCE ARTIFACTS AND IMPROVE COVERAGE IN MR SPECTROSCOPY

Abstract

A system and method of improved homogeneity in internal magnetic resonance (MR) imaging is disclosed. When acquiring MR images that require insertion of an RF coil into a subject, an intracavity coil assembly, or probe, is employed for acquiring MR data of an internal region-of-interest. The intracavity probe includes an RF coil for receiving MR data and a housing enclosing the RF coil. A homogeneity enhancing material is disposable within the housing after insertion into the subject. As a result of disposing the homogeneity enhancing fluid and the RF coil within the housing, inhomogeneities resulting from an air–tissue interface between the RF coil and the subject are reduced.